

**DYNAMIC COMMAND AND/OR ADDRESS MIRRORING SYSTEM AND
METHOD FOR MEMORY MODULES**

ABSTRACT OF THE DISCLOSURE

A memory module includes a memory hub that couples signals to memory devices mounted on opposite first and second surfaces of a memory module substrate. The memory devices are mounted in mirrored configuration with mirrored terminals of memory devices on opposite surfaces being interconnected. A memory hub mounted on each module alters the configuration of address and/or command signals coupled to the memory devices depending upon whether the memory devices on the first surface of the substrate or the memory devices on the second surface of the substrate are being accessed. Alternatively, the configuration of the address and/or command signals coupled to mirrored memory devices may be altered by a register mounted on the substrate that is coupled to the memory devices or by a memory controller coupled directly to memory devices on one or more memory modules.